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# Master Planning Program

The objectives of the Master Planning Program are as follows:

1. To establish an overall plan for the long-term development of the park under existing legislation and government policies.
2. To identify and delineate the major resources of the park as they relate to the human and natural characteristics of the area.
3. To establish a zoning plan which will provide a sound balance between use and preservation.
4. To designate areas for the development of visitor facilities in relation to character, scale, visitor demand and the capabilities of the area in question.
5. To provide the basic guidelines relating to the circulation system, water access routes and trails for both visitors and park staff.
6. To provide the basic guidelines relating to the location of administration and operational facilities.
7. To guide the development of the park, with due consideration to the interrelationship between developments inside the park and factors operating in the surrounding area.
8. To involve the public as a participant in the overall master planning program.

## Goal

The goal for Polar Bear Provincial Park should be threefold:

1. To protect its environment for the benefit of present and future generations from significant alterations by humans.
2. To provide quality, low-intensity wilderness recreational opportunities.
3. To provide opportunities for complementary park-related scientific research.

## Statement Explaining the Goal

Environmental protection is given top priority because of the park's delicate and unique qualities when considered on a world scale. The word "significant" must be defined in measurable terms. Obviously, there will be some destruction of habitat at development sites within the access zones. However, at other than these very restricted locations, the aim should be to permit the least possible amount of humanly caused alteration, consistent with approved uses and carrying capabilities. In no case should the irreversible impairment of the environment be allowed.

Wilderness canoeing and fishing, backpacking and the study and appreciation of natural and cultural features are the prime recreational activities. Limited waterfowl hunting at the mouth of the Sutton River and Shagamu River should be allowed.<sup>1</sup>

The emphasis should be placed completely on unmechanized activities with very few exceptions. Exceptions could include guide-operated power boats in the Sutton River and Winisk River access zones and along the coast, as well as aircraft landing at access zones. Environmental carrying capacities for visitors should be established at access zones in order to help ensure a quality wilderness experience and to protect the environment against over-use.

Polar Bear Provincial Park is of scientific importance particularly with regard to permafrost, arctic tundra and polar bears. Park policies should allow for scientific research of a non-destructive nature.

## Park Classification

Polar Bear Provincial Park is classified as a "primitive park"<sup>2</sup> and should be managed and protected according to the directions provided in the Ontario Provincial Park Classification and Zoning System and The Provincial Park Act and its regulations.

Some departures from the initial objectives of the wilderness classification should be made so as to accommodate the very special circumstances of Polar Bear Provincial Park. For example, waterfowl hunting will be allowed at points in Access Zones 2 and 4 because of the precedent of this activity at these locations and because of the important relationship of the native people to the management of the park. Any hunting by non-native people at these access zones should be done through the goose camp operations.

Such special exceptions should in no way be construed as any sort of precedent with regard to other provincial wilderness parks in Ontario.

## Park Zoning

It is proposed that five access zones, five nature reserve zones and three wilderness zones be established as shown in Figure 1. A more sophisticated zoning system may evolve, however, with more detailed knowledge of the park's resources.

Significant historical and archaeological features in four areas of the park suggest that there may be four historical zones. Further on-site investigation of at least three of these resources is necessary to determine if they fulfill the criteria for zone designation. Until the work is completed, these features and their landscapes will be identified in the interim as "historical areas."

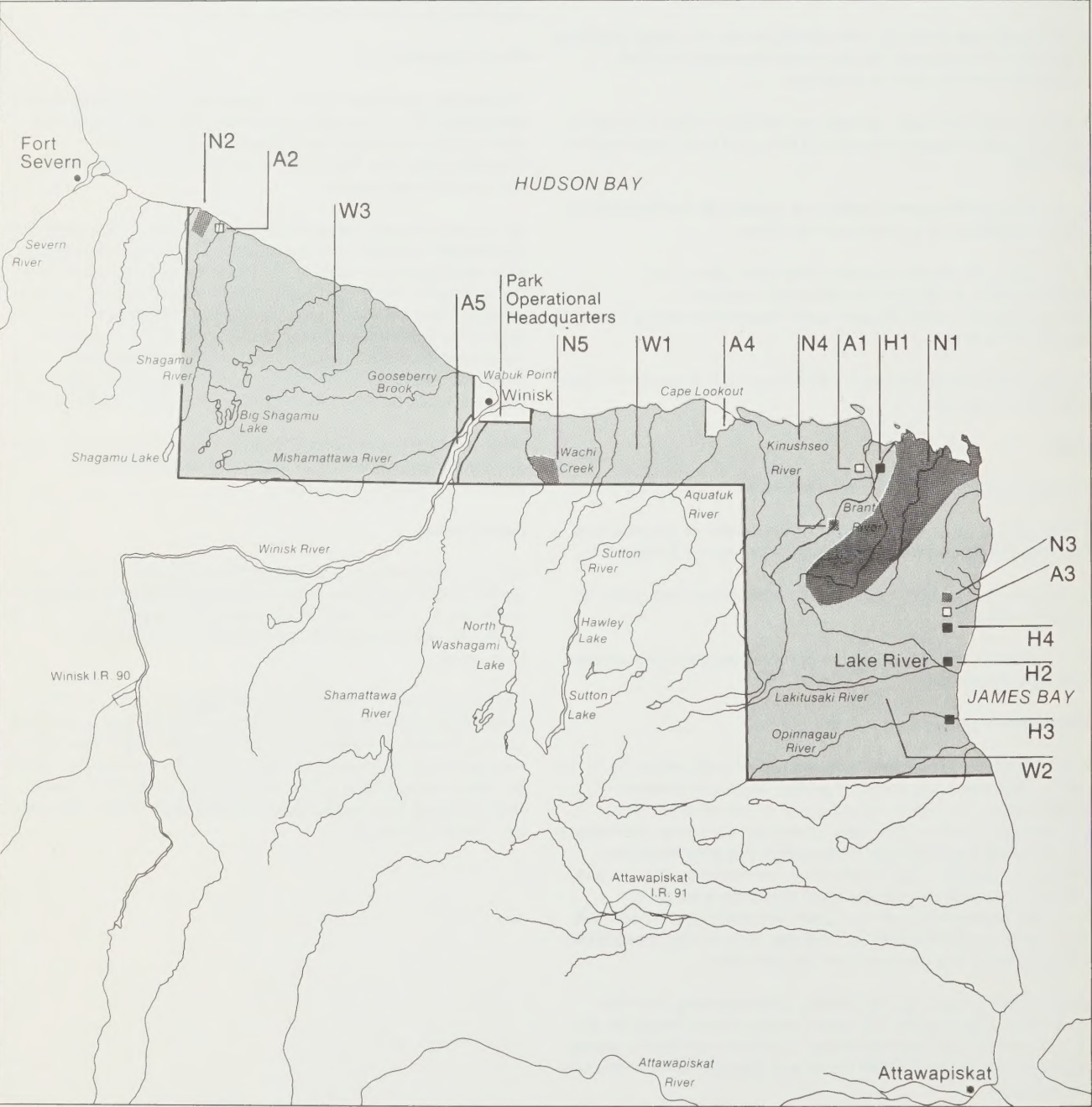
<sup>1</sup> Cree-operated goose camps existed at these locations before the legislative creation of the park. The camps should remain only as long as the present operators or their families wish to maintain the facilities.

<sup>2</sup> This designation is proposed to be changed to "wilderness park," which is the term used in this document.

Zones and Areas

- **Access Zone**  
A1 Brant River  
A2 Shagamu River  
A3 Site 415  
A4 Sutton River  
A5 Winisk River
- **Historical Area**  
H1 Brant River  
H2 Lake River  
H3 Opinnagau River  
H4 Site 415
- **Nature Reserve**  
N1 Black Duck River  
N2 Shell Brook  
N3 Site 416  
N4 Site 421  
N5 Wachi Creek
- **Wilderness Zone**  
W1 Central  
W2 East  
W3 West

1 inch equals 32 miles  
1 centimetre equals 20.3 kilometres





# Access Zones

## Management Objectives

It is proposed that access zones should be provided at five locations within and near Polar Bear Provincial Park – Brant River, Shagamu River, Site 415, Sutton River and Winisk River. The five zones occupy a total of 5,100 acres (2,064 ha). Facilities and services, including public information and interpretation, will be provided as necessary at each access zone. The park's operational headquarters at Winisk, outside the park boundaries, should be the major location for service and supplies. The Ministry District Office in Moosonee will be responsible for much of the park administration work.

## Activities and Facilities

Activities and facilities should be directed toward a wilderness-type use of the natural features of the park. Only facilities and activities which are related to the use of these natural features and which will cause minimal damage to the park environment should be allowed.

Activities involving mechanized vehicles should not be permitted except in the case of motor canoes used by native guides at the Sutton River and Winisk River access zones.

Except during emergencies, aircraft landings should be made only at access zones. Aircraft owners must supply their own fuel. They should also carry emergency equipment including transponders as prescribed in The Air Regulations and Aeronautics Act (No. 216) and The Air Navigation Orders (Series II, No. 10 and Series V, No. 12).

Camping facilities should be operated by reservation only. Equipment, including tents and canoes, should not be left unattended elsewhere in the park for more than one day by any individual or group except at access zones.

## User Capacities

The total number of visitors at each access zone should be restricted to designated quotas. Quotas will be revised from time to time in the light of operating experience. Once park development has reached an optimum level, it should not be exceeded. Facilities and service should be kept to a minimum, and these will be provided almost exclusively at access zones.

No overflow use should be permitted in the park. Once visitor capacities are reached in any zone, no further entry should be permitted until use again drops below the capacity level. Park access zones and other park areas should be monitored at the end of each visitor season to ensure that capacities have been accurately set so that no more than an acceptable minimum of site deterioration will be experienced during any one year.

Aircraft entry into the park should be by Ministry-issued landing permits only. Entry into the park interior should be made only through access zones.

Each visitor or group entering the park should require a park travel permit indicating the point of entry, the route and mode of interior travel, the point of exit and the duration of the stay. This permit should be issued for a fee at Moosonee and at all access zones.

No pets should be allowed in the park. Garbage and refuse should be brought to designated collection sites from all park areas by visitors.

## Resource Management

Resource management should be directed toward low-intensity, high-quality recreational experiences and toward the maintenance of a quality wilderness environment to provide those experiences.

Fishing should be controlled only at access zones. This should be explained to the public through interpretive media.

Waterfowl, ptarmigan and snipe hunting should be permitted only at the Shagamu River and Sutton River access zones and in accordance with The Ontario Game and Fish Act and The Migratory Bird Convention Act. The hunting of caribou and polar bear by native people is discussed later.

Firearms should be allowed only at the Shagamu River and Sutton River access zones for use by clients of the Cree-operated goose camps. Sealed firearms may be carried elsewhere in the park only with the written consent and according to the stipulations of the District Manager at Moosonee.

Environmental quality monitoring should be carried out at access zones and elsewhere in the park on a regular basis.

## Visitor Services

Visitor Services in Polar Bear Provincial Park should provide visitors with a knowledge of the park's environment, management and facilities.

Information concerning the park should be provided in Ministry publications and park brochures and by staff at Queen's Park, by regional and district offices, park headquarters and at access zones. The media should be used to keep the public up-to-date concerning the park and its management policies.

The communications system should be directed toward improving visitor enjoyment and also the understanding of the park, including its environmental fragility and human carrying capacity. Park publications and limited exhibit materials should be available at access zones and park headquarters at Winisk and departure points such as Moosonee.

## Research

Park-related scientific research should be fostered to help expand knowledge of the park's environments subject to Ministry of Natural Resources policies, as noted in Appendix B. Basic laboratory facilities and limited accommodation should be made available to approved research programs at Site 415 Access Zone.



## Wilderness Zones

### Management Objectives

The three proposed wilderness zones are mainly dedicated to the protection (from interference by man) of large tracts of unimpaired wild land for wilderness recreation and scientific purposes. They occupy 5,912,300 acres (2,392,649 ha). The wilderness zones provide retreats in which visitors may enjoy the benefits of solitude and challenge derived from an undisturbed natural landscape. They are to maintain the diversity of landforms, habitats and species, providing benchmark areas from which to evaluate our understanding and the management of our environment.

Specifically, these vast zones will be protected for environmental and scientific purposes, in addition to acceptable recreational pursuits such as camping, canoeing, hiking, nature study and photography.

The park environment includes: some of the most temperately-located continuous permafrost and arctic tundra in the world; part of the world's southernmost active nesting colony of snow geese; a number of species of birds which nest nowhere else in Ontario and some of the best spring and summer caribou habitat in the province.

In addition to the relevant sections of the broader policy statements mentioned under Access Zones, the following specific policies will apply to the wilderness zones.

### Activities and Facilities

When and where necessary, primitive campsites, portage markers and earth-pit toilets should be established to meet minimum requirements. A system of marked hiking trails should be developed along some of the numerous beach ridges. Environmental monitoring of these trails should be started as soon as they are located, so that any deterioration resulting from over-use may be detected as soon as possible, the trails rehabilitated and the problem corrected.

### Land-uses Adjacent to the Park

Any man-made entity, capable of significantly altering the natural environment of Polar Bear Provincial Park, should be kept so far away from the park that its effects will not be of any significance. The effectiveness of such a regulation will depend upon periodic environmental monitoring throughout the park's natural systems.

Should recent off-shore oil explorations prove successful, the subsequent extraction and transportation of this resource might prove to have deleterious effects upon Polar Bear Provincial Park. In the face of such developments, careful evaluations of potential threats to the park environment would be required before any decision can be made.

The Federal Government should be requested to develop management policies for the off-shore islands which will be consistent with those of the Polar Bear Provincial Park Master Plan.

## Nature Reserve Zones

### Management Objectives

The proposed nature reserve zones in Polar Bear Provincial Park total 34,300 acres (13,881 ha). Their purpose is to protect unimpaired wild land from human interference for scientific and recreational purposes. These zones are essential because they protect a diversity of landforms, habitats and species of our province. The five proposed zones are as follows:

#### Nature Reserve Zone 1 (Black Duck River)

Zone 1 comprises the complete watershed of the Black Duck River. It is one of the most interesting and sensitive ecological areas in Polar Bear, as it includes: one of the southernmost regions of permafrost in the park and possibly in the Northern Hemisphere; many vegetation types including a good representation of ecotonal areas and the most arctic plant elements in the park; nesting areas of arctic breeding birds which occur nowhere else in Ontario and including a substantial section of the snow goose nesting colony; important late winter, spring and summer caribou range and part of the area of highest polar bear concentration in Ontario.

#### Nature Reserve Zone 2 (Shell Brook)

Zone 2 is a transection from the Hudson Bay coastline between the Shagamu River and Shell Brook, inland to forested areas. It includes one of the most superb series of parallel raised beaches in Canada (Prest, 1967).

#### Nature Reserve Zone 3 (Site 416)

A few hundred yards south of Site 416, adjacent to the west side of the Mid-Canada Line road, is a gravel pit with a large deposit of blue mussel (*Mytilus edulis*) shells. The shells were largely restricted to the intertidal regions of the Tyrell Sea, and so are of considerable scientific importance in providing accurate carbon 14 dates for coastal emergence.

#### Nature Reserve Zone 4 (Site 421)

Zone 4 is the old Mid-Canada Line Site 421, located in a lichen heath-forest tundra region. Unlike the 415-416 complex, the site has been virtually undisturbed since the Mid-Canada Line operations ceased in 1965. It should provide interested parties with an opportunity to study the reaction of the natural environment to a firmly dated physical disturbance of considerable magnitude.

#### Nature Reserve Zone 5 (Wachi Creek)

The Wachi Creek Nature Reserve Zone encloses the only obvious place in Polar Bear where Precambrian rocks obtrude through Paleozoic limestone. Vegetation here reflects this anomalous bedrock condition.

### Policies

In addition to the relevant sections of the broader policy statements mentioned under Access Zones, policies for nature reserve zones will be identical to those for wilderness zones.

Entry to nature reserve zones in most cases will be limited, on a strict visitor capacity basis, to special interest groups only.



# Historical Areas

## Management Objectives

The purpose of historical zones in Polar Bear Provincial Park is to protect areas of archaeological and historical significance for scientific and recreational purposes. The historical areas comprise 300 acres (121 ha).

Further on-site investigations of Site 415, the Brant River, Lake River and Opinnagau River features will determine whether they fulfill the criteria of historical zones. The identification of the following as "historical areas" is an interim measure until the necessary investigation is completed.

### Historical Area 1 (Brant River)

The Brant River Historical Area encloses one of the few acknowledged prehistoric sites within Polar Bear.<sup>3</sup> It was the first prehistoric site to be located within the Hudson Bay Lowlands.

### Historical Area 2 (Lake River)

The Lake River area contains the remains of a Hudson Bay Post settlement which existed from 1929 until 1967.

### Historical Area 3 (Opinnagau River)

The area at the mouth of the Opinnagau River was the site of the Hudson's Bay Company and Revillon Frères Trading Company outposts which were in operation during the second and third decades of this century.

### Historical Area 4 (Site 415)

This area contains the remains of the most important Mid-Canada Line base within the park. The construction and operation period was from 1955 to 1965.

## Policies

In addition to the relevant sections of the broader policy statements mentioned under Access Zones, policies for historical zones, once more detailed studies have been completed on these areas and zones declared, should be identical to those for the wilderness zones.

Entry into historical areas in most cases should be limited to special interest groups only, on a strict visitor capacity basis. Historical areas in Polar Bear may be researched in accordance with policies detailed in Appendix B.

# Native People and Polar Bear Provincial Park

Recent archaeological work by Irving and Tomenchuck (1972) and Pollock and Noble (1974) suggests that Cree-like people have lived in what is now Polar Bear Provincial Park, virtually from the time of its emergence from the Tyrell Sea until the present.

It is hoped that the income opportunities of the native people in the communities adjacent to the park will benefit from the recreational and other uses of the park in a way consistent with the protection of the environment and the maintenance of a high-quality wilderness experience.

Concern is expressed for the well-being of native people in communities near the park, particularly Winisk, which is closest to it. Native interest will be of prime importance, whenever there is no conflict with the goal statement, as for example in guiding and working as park employees. The priority claim to such consideration by nearby native residents is recognized as stronger than the claims of native people further afield and other Ontario residents in general.

Local native people should be able to continue their traditional activities such as hunting, fishing, trapping and the gathering of wild commodities. It is hoped that native people will be interested in caring for the well-being of the parkland including the animal species which live therein. The modern techniques of hunting and trapping, and commercial activities such as goose camp operations, can be carried out only in the most responsible way so as not to lessen the integrity of the wilderness concept.

## Resource Management

Native people should be permitted to hunt caribou and polar bear in the park.

## Field Personnel

Where possible, field personnel should be native people selected from the communities closest to the park. Ten seasonal positions would be available initially, representing 45 man-months of employment. Native people living near Polar Bear Provincial Park should be given first consideration for employment as guides.

An agency (government or other) which is capable of developing a suitable guide training program should be required to provide guiding expertise as the need arises. Initially, there would be a requirement of a minimum of seven guides during the visitor season, but this number could be substantially increased if park use becomes higher.

Park field positions should be filled, when suitable candidates are available, by native people from the communities of Attawapiskat (and Hawley Lake), Fort Severn and Winisk. When possible, successful workers should be hired again to maintain a desirable degree of employee continuity.

<sup>3</sup> The cache pit site near Site 415 is quite possibly of prehistoric age.

# Site Planning Recommendations

Training should be provided for all seasonal employees (and perhaps selected goose camp staff) at the beginning of each season. The training should deal with job objectives and techniques, park familiarization, park regulations and other pertinent information.

Because of the sensitive characteristics of Nature Reserve Zone 1, it is hoped that even native people, other than those who presently operate registered traplines, will refrain from hunting in this area.

## General Consideration

A number of specific site problems occur at Polar Bear Provincial Park access zones:

1. Spring flooding can cause the partial destruction of stationary facilities and a scouring of the site by river-moved ice. Every spring, in addition, the Brant River, Shagamu River and Sutton River flood because of their inadequate banks, deposit a layer of silt on the scoured area and this tends to retard site recovery. During a wet summer, the saturated vegetation mat never really dries out, making the site even more vulnerable to destruction by human use.
2. Soils are quite shallow in some areas, particularly in the dry, beach ridge tundra at Site 415. Permafrost may complicate site development at some access zones.
3. The vegetation at the access zones is not especially resilient, particularly at Site 415, because of the site's abundance of lichen. These plants are delicate, wet or dry. The short growing season means that damaged vegetation has very little time to recover. This situation is much more of a problem in Polar Bear than in other provincial parks in Ontario.

Because of the absence of trees at access zones (with the exception of shrub willows in some locations), larger than traditional buffering spaces will be required between campsites.

4. Because of site fragility, park interpretive and informational services should emphasize sound environmental practices to be used by visitors.

## Site 415 Access Zone

### Site Description

The following points characterize the site:

1. The land is extremely flat, with the minor exception of beach ridges;
2. The lakes are shallow, gravelly, and their water is clear, cold and largely devoid of aquatic plants;<sup>4</sup>
3. The soil is extremely shallow with some patches of permafrost (within 4' or 1.22 m of the surface of the ground where it occurs);
4. Because of the absence of trees (except for clumps of willows such as those along the southeast shore of Lake A), there is absolutely no shelter from the prevailing northwesterly wind.

<sup>4</sup> Drainage of most of these lakes is by percolation through the surrounding materials. Stream drainage is uncommon on the beach ridge complex. For this reason, pollutants of any sort represent a definite environmental threat.



### Visitor Activities

Visitors to Site 415 Access Zone should have opportunities to participate in the following activities:

- camping
- hiking
- historical appreciation (of the old Site 415 radar base)
- nature study and photography
- day tours

### Major Facility Outline (Numbers correspond to those in Figure 2) \*

1. *Dock (T-shaped)*: This should be a permanent facility. Seaplane landing will be permitted only at Lake A.

2. *Office, information and interpretive area*: Ideally, such a structure should be architecturally compatible and harmonious with the natural surroundings. It will very likely be considerably different in its design from buildings in any other provincial park. Cree wigwams were traditional human dwellings in this area. Perhaps some elements of their design could be incorporated into the building. Such a building should accommodate six persons and should therefore have three bedrooms, a washroom, living room, kitchen-dining room area, office area and an interpretive/information area.

3. *Laboratory*: The laboratory could be a somewhat similar style of building to facility 2. It need only provide shelter, table space, stools, light and perhaps a few basic pieces of laboratory equipment and materials.

4. *Warehouse-garage*: This facility should be large enough to store a tractor and trailer vehicle which will be necessary for access zone development and operation. Emergency food provisions should also be kept on standby at this station.

5. *Mini-incinerator*.

6. *Toilets*: Earth pit toilets should be a satisfactory method of sewage disposal at Polar Bear Provincial Park access zones. More sophisticated sewage facilities would be extremely difficult and expensive to operate and probably unwarranted. It is important, however, that toilets not be located on or near permafrost areas. All such facilities should also be a minimum of 150 feet (45.7 m) away from any lake at this site.

### Campground Development

This would involve development of Lake A as a first phase and then Lake B, if and when use warrants. The proposed design for campsites is indicated in Figure 3. The guidelines presented here are tentative. Actual campsites should be located with due regard for local site circumstances and conditions.

Lake A can accommodate approximately six campsites which should be serviced by three earth pit toilets, and Lake B should have seven campsites and one earth pit toilet. This makes a total of 13 campsites and four earth pit toilets. During campsite development work, however, a close site inspection may reveal that there is room for fewer than 13 campsites. Under no circumstances should there be more than 13 sites.

All campgrounds are on "dry" tundra. The pathways to all campsites (and their peripheral areas) and privies should be a solid gravel surface.

A tent platform with an 8' x 10' (2.4 m x 3.0 m) canvas tent and fly sheet should be supplied at each campsite.

The water source at each campground should be the campground lake. Water should be hand-drawn. It should be regularly tested to ensure its potability.

Garbage disposal for combustible materials should be provided at the mini-incinerator.

### Brant River Access Zone

#### Site Description

The following outline characterizes the site:

- There is extreme flatness of the land except for clay riverbanks which tend to be low;
- The area is subject to spring inundation, siltation and ice-push;
- The soils are shallow;
- Little shelter is provided by trees, although willows that border the river tend to offer somewhat more protection than in the case of Site 415.

#### Visitor Activities

Visitors to the Brant River Access Zone should be able to participate in the following activities:

- fishing (for brook trout)
- camping
- canoeing (canoes will be available for rental at the access zone office)
- hiking
- observing and photographing the natural features of the area














### Major Facility Outline (Numbers correspond to those in Figure 4)

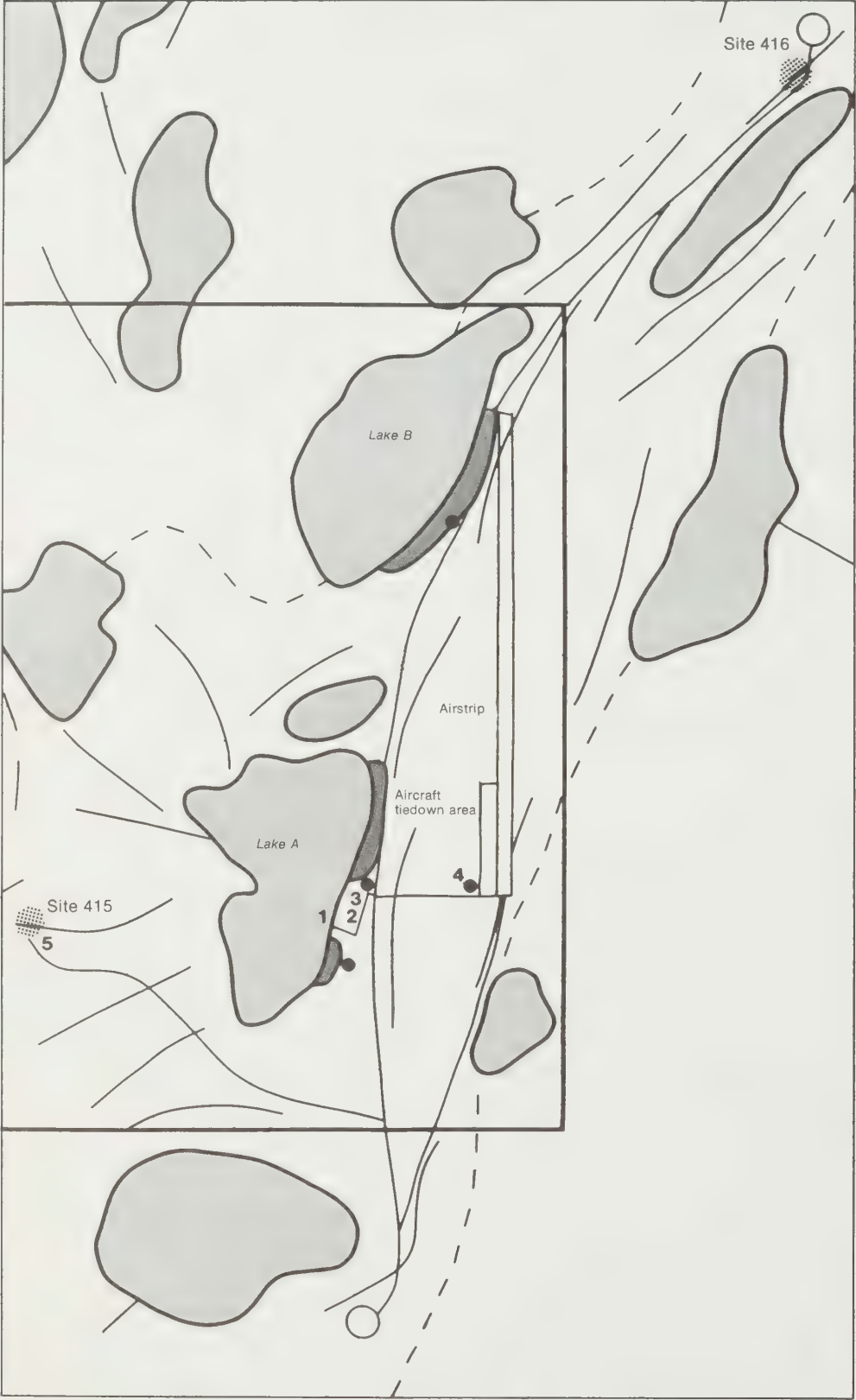
1. *Dock*: This should be a floating modular facility, capable of being broken down for winter storage away from the river in the lee of an elevated stand of willows. Modular steps from the dock should be built up the bank. Shore tie-downs for three seaplanes should be provided nearby on the river.

2. *Office*: Tent frame (modular).

3. *Warehouse*: A cabin on a three-foot (0.9 m) solid stilt foundation for year-round storage.

Site Description  
Site 415 Access Zone

- |   |   |   |                                      |   |   |
|---|---|---|--------------------------------------|---|---|
|    | Existing road and development             |    | Laboratory                           |    | Access zone boundary                            |
|   | Gravel pit                                |   | Warehouse and garage                 |   | Boundary between beach ridges and sedge meadows |
|  | Proposed road and development             |  | Mini incinerator                     |  | Beach ridges                                    |
|  | Dock                                      |  | Toilet                               |   |   |
|  | Office, information and interpretive area |  | Proposed campground development area |   |   |



1 inch equals 0.25 miles  
1 centimetre equals 0.2 kilometre





1 inch equals 69 feet  
1 centimetre equals 8 metres

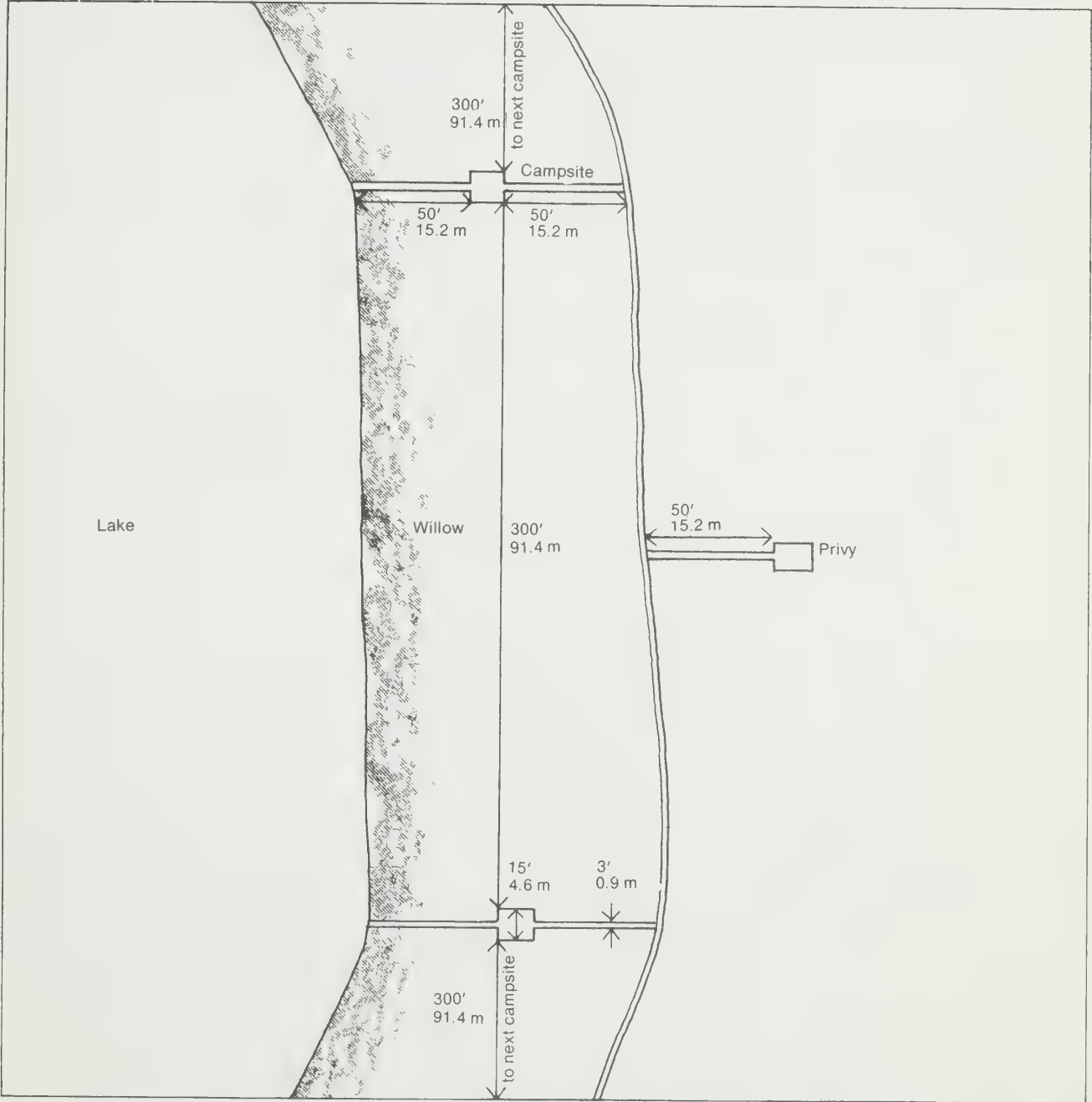
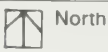


Figure 4

Site Description  
Brant River Access Zone

- 1 Dock
- 2 Office
- 3 Staff quarters
- 4 Warehouse

- Toilet
- Proposed campground development area
- Access zone boundary

1 inch equals 1,531 feet  
1 centimetre equals 183 metres





### *Campground Development*

Campgrounds should be developed in the following order: A, B, C and D. Assessment of site deterioration, if any, should be made at an early time and periodically thereafter to determine the ideal carrying capacity of this access zone. Only Campground A and Campground B should be developed for the first year of operation. Subsequent development should be made in light of Phase One experience and requirements.

Campsite dimension and layout should be the same as for Site 415.

The campground should provide approximately the following number of campsites, although detailed on-site inspections may reveal that there will be room for fewer than are shown by the total figure.

Campground A	3 campsites + 1 earth pit toilet
Campground B	1 campsite
Campground C	2 campsites + 1 earth pit toilet
Campground D	5 campsites + 1 earth pit toilet
Total	11 campsites + 3 earth pit toilets

Pathways to campground, campsites, privies and other facilities should be of modular boardwalk rather than gravel, as at Site 415. Each developed campsite should have a set of modular steps down to the river. A tent platform, tent and fly sheet should be erected at each campsite as at Site 415 Access Zone.

The water source for the access zone is the river. All water should be drawn.

### **Other Access Zones**

Access by aircraft and other acceptable means to the goose camp area locations near the mouths of the Shagamu River and Sutton River should be permitted. However, no facilities will be available other than those provided by the camp operators. In addition, guide-operated motor canoes will be permitted in the Sutton River and Winisk River access zones.

### **Site Description**

The site description for the Shagamu River, Sutton River and Winisk River access zones is basically the same as for the Brant River Access Zone. The locations of the zones are indicated in Figure 5. As with the Brant River, low water conditions during late July and August and occasionally September can create aircraft access problems. When water conditions are unsafe, these access zones should be officially closed to the public.

### **Visitor Activities**

Visitors to these access zones should be able to take part in:

- brook trout fishing
- camping
- canoeing
- hiking
- hunting
- nature study and photography

### **Winisk**

Although outside Polar Bear Provincial Park, the airstrip, Cree goose camp and park operations office complex at Winisk (Figure 6) will serve as an important access area. Also, guide-operated motor canoes should be allowed in the Winisk River Access Zone.

### **Potential Access Zones**

At some point in the future, it may appear advisable to create one or more new access zones inside or at the periphery of Polar Bear Provincial Park. Master plans, after all, should be flexible enough to allow for changes over the years. However, it is also important that the wilderness concept not be jeopardized by an overabundance of interior access zones. It is possible to have too many.

Figure 5

Shagamu, Sutton and Winisk Rivers Access Zone Locations

- 1 Shagamu River Access Zone
- 2 Winisk River Access Zone
- 3 Winisk Access Area
- 4 Sutton River Access Zone

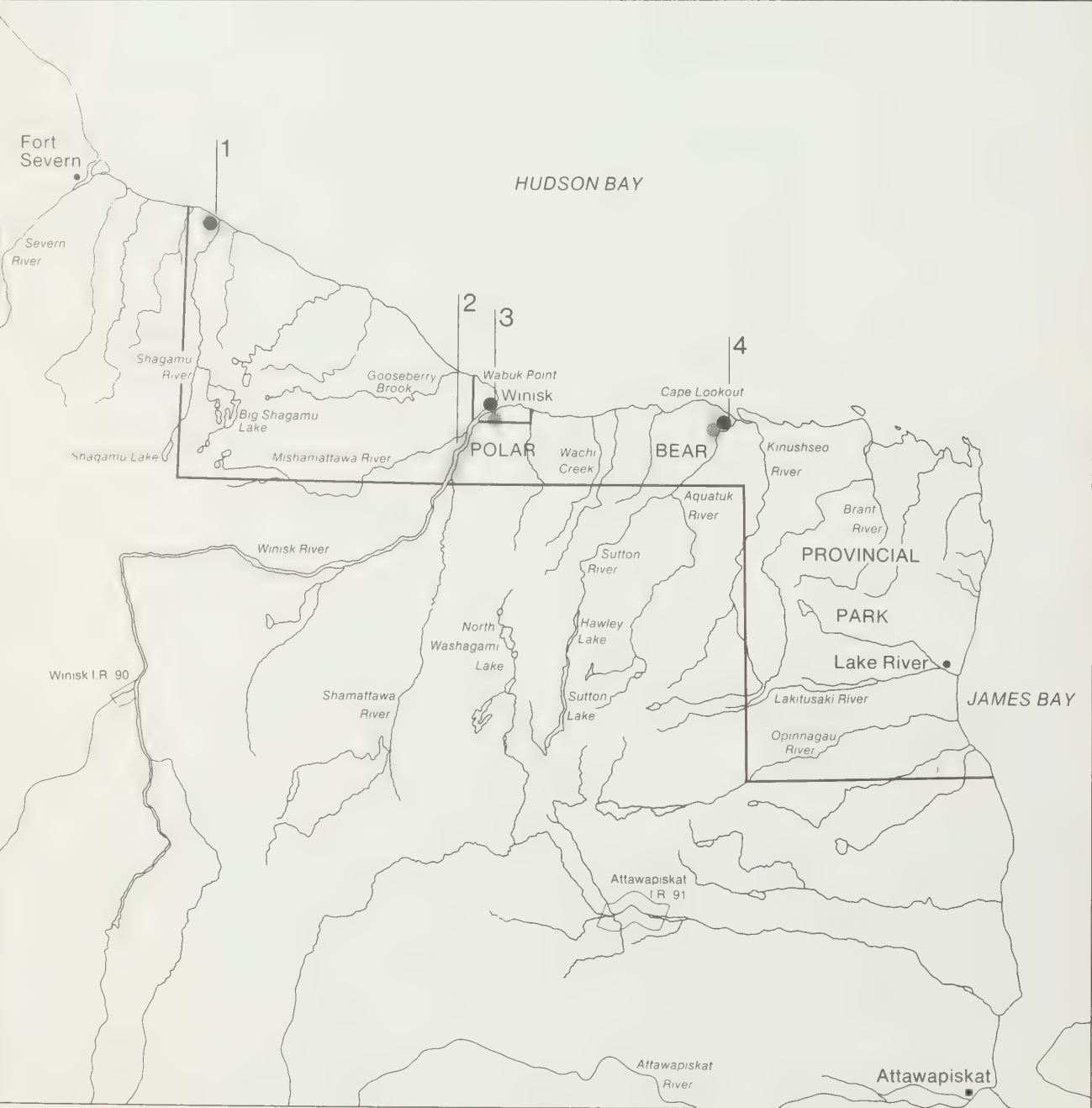
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Seaplane landing area

■

Cree goose camp

1 inch equals 32 miles  
1 centimetre equals 20.3 kilometres





1 inch equals 7,339 feet  
1 centimetre equals 880 metres



# Visitor Services

Visitor services facilities within the park should be available only at access zones in accordance with the management objective which states that: Visitor services in Polar Bear Provincial Park should consist of a program which will provide visitors with a knowledge of the park's environment, management and facilities. As previously noted, this program will also be implemented outside the park at Winisk and Moosonee.

In a wilderness park such as Polar Bear, the potential for interpretive over-kill is very real. Many legitimate themes exist for such a large park and there will always be a temptation to explore them thoroughly—perhaps overly so—and lavishly in terms of media. Because of the park's nature and classification, such an approach would probably be a mistake.

Many of the park's visitors will be experts at their chosen avocation, be it hiking, canoeing, angling or other activities. They will want only some very specific directions and information. As interpretation for such users will be largely of a do-it-yourself variety, interpretive development should be carried out with appropriate restraint.

## Activities

Certain outdoor activities (water skiing, for example) are not in keeping with the wilderness classification and the goal of providing a low-intensity wilderness recreation experience and are therefore not acceptable or desirable at Polar Bear Provincial Park. Other activities which are appropriate (such as sunbathing and swimming) are unlikely to be attempted by many visitors because of the generally cold climate and the high incidence of biting flies. Also, because of the extreme climate, winter activities such as cross-country skiing, ice fishing, snow-shoeing and winter-camping will never be very popular at Polar Bear. There are better provincial parks for these activities. However, the idea of special interest groups using the Cree camps during the winter months under the operator's guidance should remain a possibility.

Visitor services will play an important part in making visitors aware of the recreational possibilities available and also the hazard involved.

## Activity Direction

### Angling

Some of the best brook trout fishing in Ontario is available at Polar Bear Provincial Park. It is important, however, that angling be presented to visitors as a component of a wilderness experience rather than a separate activity on its own. Complete information should be readily available on park fishing regulations and fishing lore, i.e., species, recommended rivers, best seasons to fish, suggested lures, etc.

### Camping

Prospective visitors should be made aware of the special equipment, techniques and precautions which can be important in helping to ensure a satisfying camping experience in the park.

### Canoeing

The best canoeing possibilities should be inventoried to provide accurate canoe route descriptions. These routes should include: the navigable sections of the Brant River; Hawley Lake to the mouth of the Sutton River; the Winisk River and the Winisk-Mishamattawa River-Big Shagamu Lake-Shagamu River-Winisk route.

Other rivers such as the Kinushseo, Lakitusaki and Opinnagau might also be considered for inventory work. However, it is important not to overdo such activity, particularly in a wilderness park where it is expected that many of the prospective clientele will be individualistic and sophisticated enough to wish to explore areas away from the beaten track. Some rivers suitable for canoeing should purposely be left undocumented.

### Hiking

As indicated in Figure 7, there appear to be some excellent hiking opportunities in Polar Bear Provincial Park. These include:

1. A series of interconnecting beach ridges along the Hudson Bay coast between Shell Brook and Wood Creek, a distance of 40 miles (64 km).
2. A similar, almost continuous line of coastal beach ridges which stretch from near the northern tip of Cape Henrietta Maria to south of Big Owl Creek along the coast of James Bay, a distance of close to 50 miles (80 km).
3. The old Mid-Canada Line road from Site 415 to the James Bay coast (18 miles; 28.8 km).
4. An interconnecting series of potential trails which lie to the north of the road mentioned in (3) along a magnificent beach ridge complex.

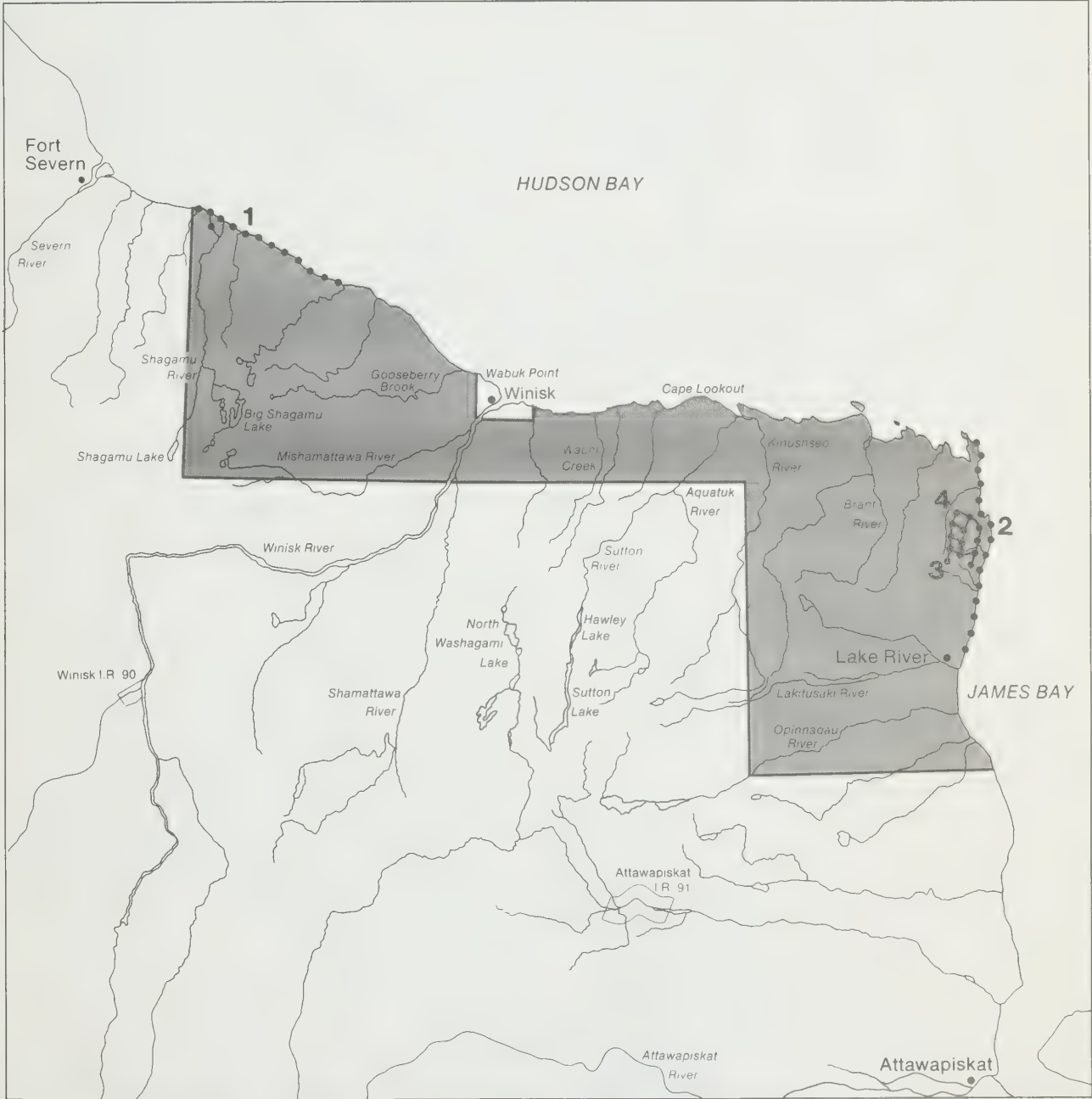
Trail 1 is easily accessible from the Shagamu River Access Zone. It crosses some excellent brook trout streams and should provide exceptional opportunities to view shore birds and other wildlife, including polar bears and caribou. The same can be said about Trail 2. Unfortunately, both routes involve the cold, wet prospect of fording a number of brooks. This could be a problem when high tides and on-shore winds are coincident, as sometimes happens. Trails 3 and 4 involve no such difficulties and offer good chances to view wildlife. Trails 2, 3 and 4 are all accessible from Site 415 Access Zone. All four prospective routes should be inventoried and marked as clearly but unobtrusively as possible. Trail descriptions should be made available. A potential network of trails north of Site 415 is shown in Figure 8.

### Historical Appreciation


This should be largely an interpretative and information function. Details about sites of historical interests, for example, the Lake River post and the Mid-Canada Line sites, especially Site 415, should be well-documented and made available to visitors. A description of how the sites may be reached should be included.



1 inch equals 32 miles  
1 centimetre equals 20.3 kilometres

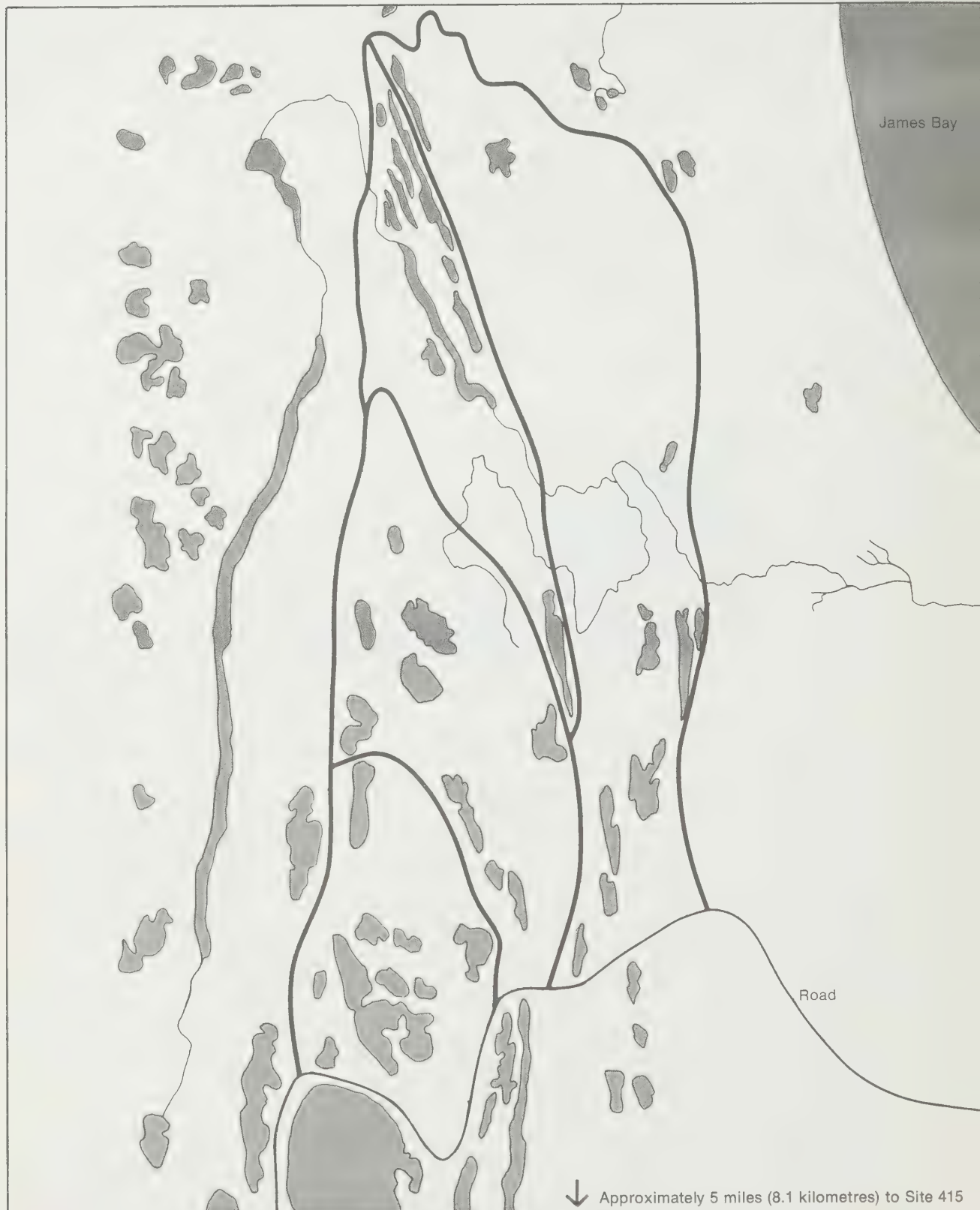


Potential Trail Network North  
of the Site 415 James Bay  
Mid-Canada Line Road

 Trail Network

1 inch equals 1 mile  
1 centimetre equals 0.6 kilometre

 North



### Hunting

The two Cree goose camps at the Shagamu River and Sutton River offer hunters some of the finest waterfowl hunting in North America. Prospective hunters should be informed of the park's "wilderness ethic," its regulations and its hunting lore.

### Nature Study and Photography

Interpretation and information functions will be most important. In addition to specific information about certain park resources, visitors will wish to know what there is to see and photograph, where certain features may be located and how to reach these places.

### Special Interest Groups

Special interest groups will likely wish to visit Polar Bear Provincial Park occasionally. The Ministry should be prepared to offer and advertise services available to guide such groups on canoeing and hiking excursions to various designated locations of special interest.

Day-use groups of considerable size, landing at Site 415 Access Zone aboard larger aircraft, could present special problems. Such groups would likely be on charter or special flights en route to Winisk from Moosonee. Presumably, they would spend up to two hours exploring the tundra at ground level. The carrying capacity of the site could easily be exceeded unless such groups were closely controlled. In addition, this sort of access zone use could detract from the semi-wilderness experience of campers at Site 415, if the two groups are not kept reasonably well separated.

Fortunately, the access zone lends itself to such a separation. It is recommended that day-use groups be routed from the airstrip south to Site 415 and thence along a short road which ends at the large lake to the west of Site 415. This large, shallow pond is the home of numerous waterfowl. In a short time, such a group could see good examples of both wet and dry tundra and visit a lake which invariably supports abundant, visible birdlife. At the same time, the naturalist or group leader could ensure that the visitors stay on the existing road, thereby presenting no threat to the environment, and could ensure that the group keeps at an acceptable distance from campers.

The feasibility and desirability of such a program could be determined by Ministry-arranged charter flights. A limited number of day-use visitors could be brought to the site in conjunction with extended-use people on their way in or out of the park, perhaps initially as often as once a week. Day-use passengers on such flights might continue on to Winisk to overnight at the Cree-operated goose camp. Opportunities for guided trout fishing excursions and exploration of the river and estuary would add considerably to such a trip.

### Viewing

The landscape of Polar Bear is colourful and interesting from the air. A generalized publication depicting the park from the air should be produced and made available to visitors via the charter and commercial air services.

### Interpretive Themes

Because of Polar Bear's large size and its location, most of the broad themes of Interpretive Unit 1, the Hudson-James Bay Lowlands (Van der Meer, 1973) will be identical to those of the park.

The park's major theme centres on Polar Bear's almost alien landscape, its vast and wild northern wilderness. These qualities, above all, seem to capture the essence of the park. They should pervade the secondary themes and be apparent in the interpretive treatment of the minor subject areas. It relates to other provincial parks in the Ontario Provincial Parks System, particularly to wilderness parks like Killarney and Quetico, but only Polar Bear is "vast" and "exotic."

The secondary themes are: (1) the park's arctic element and (2) the Forest Cree in the park, past and present. There are many minor themes or subject areas which fall under these broader thematic headings, and many have already been mentioned. The following outline matches minor subject areas with information and interpretation target areas.

### Visitor Characteristics and Visitor Theme Relationships

The following five categories of park users are expected to visit Polar Bear Provincial Park:

1. A day-use visitor who may arrive at Site 415 aboard a touring aircraft en route to Winisk;
2. A scientist who may use any of the access zones;
3. A sportsman who is primarily interested in hunting and/or fishing and who will therefore go to the Brant River, Shagamu River or Sutton River access zones;
4. A wilderness canoeist who will enter the park from the south via the Sutton River, Winisk River or possibly other rivers;



Figure 9  
Visitor Services Target Areas

Subjects	Moosonee	Winisk	Brant River Access Zone	Shagamu River Access Zone	Site 415 Access Zone	Sutton River Access Zone
Park story	•	•	•	•	•	•
Park classification and regulations	•	•	•	•	•	•
Park management	•	•	•	•	•	•
Cree people	•	•	•	•	•	•
Park access	•	•	•	•	•	•
Outdoor recreation	•	•	•	•	•	•
Canoeing	•	•	•	•		•
Hiking	•	•	•	•	•	•
Fishing	•	•	•	•	•	•
Hunting				•		•
Survival			•	•	•	•
Trapping		•	•	•	•	
Scientific research	•	•	•		•	•
Carrying capacity	•	•	•	•	•	•
Park geology	•	•	•	•	•	•
Glacial history	•	•	•	•	•	•
Park topography	•	•	•	•	•	•
Park from the air	•	•	•	•	•	•
Tides		•	•	•	•	•
Park climate	•	•	•	•	•	•
Permafrost	•	•	•	•	•	•
Park flora	•	•	•	•	•	•
Arctic element in the flora	•	•	•	•	•	•
Park fauna	•	•	•	•	•	•
Arctic element in the fauna	•	•	•	•	•	•
Insects		•	•	•	•	•
Fish	•	•	•	•		•
Birds	•	•	•	•	•	•
Sea mammals	•	•	•	•	•	•
Caribou	•	•	•	•	•	•
Polar Bear	•	•	•	•	•	•
Park ecology	•	•	•	•	•	•
Park prehistory	•	•	•	•	•	•
Park history	•	•	•	•	•	•

# Park Operation and Management

5. A wilderness-naturalist enthusiast who may enter the park at any of the access zones, most probably Site 415.

But in terms of number, the persons who never actually visit the park are also very important. These are people who develop a vicarious appreciation of the park without entering it, and they should be seriously considered in the overall visitor services program.

A generalized visitor profile indicates that the typical Polar Bear user will be a fairly affluent adult—the cost of travelling to and from the park alone implies this. Visitors would come mainly from the large urban centres of central and eastern North America. The length of stay will probably be one week or more because of the expense of reaching the park, except for the excursion visitor on a package tour from Moosonee to Winisk and return, who will likely stay for no more than a few hours. The average visitor is apt not to be a repeat customer, assuming that affluent wilderness adventurers prefer variety and have the means to obtain it. The visitor presumably will also be highly motivated because of the cost and the challenges of a wilderness holiday.

The outline in Figure 9 suggests the subject areas which will be of greatest significance to the visitor types expected at each target point. The interpretive services approach should try to relate to the interests of visitors.

## Facilities and Major Equipment Outline

The proposed park facilities and major equipment are described in the site planning section. To this list should be added the park office at Winisk River. The existing Winisk office provides information and visitor services space, in addition to living quarters for four people.

## Staffing

The proposed staffing of the park is later described under the phasing plan.

## General Operating Procedures and Recommendations

### Season

The active season for most park visitors will be the months of July and August.

However, the last half of June will also be used by both fishermen and hunters.

### Aircraft Patrol

Because of its enormous size, the most practical way of moving about in Polar Bear Provincial Park is by aircraft. Park inspection patrols should be carried out by the park superintendent from the centrally-located park office at Winisk, on a fairly regular basis (ideally about once a week, weather permitting) from mid-June to the end of September. A float and radio-equipped light airplane, such as a standard Dehavilland Beaver or even a Cessna 170 or an equivalent, should be suitable and relatively inexpensive to contract for such an operation. The aircraft, pilot and engineer (if required) should be available from early or mid-June to early or mid-October.

The patrols should be mainly enforcement-oriented during the June, September and October flights. Ideally, the park superintendent should have a good enforcement background. The aircraft should help to provide a supply and communications link-up with the access zone crews during the heavy part of the visitor season and help with other park management activities. In addition, the aircraft should be prepared to assist in carrying out search and rescue operations when required.

### Access Control and Permits

Because of the limited access zone camping provided and because of the long, expensive travel required to reach the park, a camping-by-reservation operation for Polar Bear seems warranted, complicated though this may be at times. Application should be made in writing or by phone, giving the names of proposed visitors, the access zones to be used and the intended length of stay. A central control of information should be kept at Moosonee, but landing and visitor permits, required by all visitors during the official visitor season, should also be available from the park operations office at Winisk. It is important that the operation of such a system be as flexible as possible until its procedures become well-advertised and workable.

# Capital Improvement and Phasing

Entry by seaplane to any of the access zones may be closed or restricted at any time by the park superintendent because of unsafe landing conditions due to low water levels. If it is possible, the Ministry should divest itself of any liability in connection with hazardous water conditions for seaplanes in the park. It should be advertised that visitors fly in Polar Bear at their own risk.

Entry into Historical Area No. 1 and any nature reserve zone will be permitted only by written permission of the park superintendent.

At Site 415 Access Zone, the maintenance of the airstrip, when required, should be done with the assistance of the Ministry of Transportation and Communications.

At Site 415 Access Zone only, garbage should be disposed of by the Ministry. Visitors will be responsible for removing their own garbage at other access zones.

## Forest Protection

As a very large wilderness park, Polar Bear provides its managers with an opportunity to allow a natural fire regime to operate within its boundaries. This has always been the situation as the parkland is north of 52° 30' north latitude and therefore beyond the Ontario Ministry of Natural Resources fire districts which are delineated under the provisions of The Forest Fires Prevention Act of Ontario.

North of 52° 30', the Ministry assists with the protection of human lives and property, and this function will be continued in the park, notably at access zones. Fire pumps, hose and packpumps should be maintained at Ministry access zones and at the park office at Winisk.

Because of its poorly developed drainage, Polar Bear Provincial Park almost always is a mosaic of small, dry areas (beach ridges, river banks and lakeshores), within a matrix of lakes, rivers and low-lying wet areas. Because of such excellent, natural firebreaks, the prospect of an extensive fire sweeping across the park is almost nil, except during extremely hot, dry years, which are quite rare. During such exceptional periods of fire danger, visitors should be made aware of potential risks and fire prevention methods through the park information services. The environment-oriented visitors to this park are apt to be highly receptive to such information.

## Lost Resource Development Values

It is difficult to compute the cost of creating Polar Bear Provincial Park in terms of lost resource development values—although these appear not to be large. The proven resource products found within the park are:

- gravel (from beach ridges for road building materials)
- fresh water
- peat
- sphagnum
- berries (blueberries, cloudberry, cranberries, etc.)
- wood (spruce fibre and lumber)
- fur-bearing animals (bear, beaver, fox, lynx, marten, mink, muskrat, otter and wolf)
- game animals (brook trout, geese, grouse, bear, caribou, moose, seals and whales)

The loss of accessible gravel sources from the beach ridges, which are abundant along the coast, could amount to a considerable amount in the case of potential road building, pipeline development, etc.

Although the park represents a considerable source of fresh water, present government policy would seem to dictate against its use through diversions and other means.

Peat, sphagnum and berries, although abundant in the park, suffer from low demand and distance-from-market problems. There are stands of marketable spruce along some of the larger rivers, such as the Mishamattawa and Winisk, but their distance from any market leaves them economically unexploitable at present.

There is no loss of the park's fur-producing capability, as this resource is being harvested by native trappers. Game animals are taken by native residents, and waterfowl, grouse and snipe may be shot by non-native visitors at the goose camps. The economics of goose and fish camp operations are such that additional camps in the park would probably be untenable at present.

The one fairly realistic prospect which could dramatically increase the lost resource development cost of Polar Bear would be the discovery of any significant oil and/or gas reservoirs.

## Five-phase Development Plan

The following outlines show by phase number (Phase 1 to Phase 5) the manpower, work detail and capital development projects. The work area of Polar Bear Provincial Park is limited to a work period of 14 weeks and is dependent on movements of aircraft to supply manpower, project material and field crew servicing to the development areas within the park. Numerous days could be lost because of poor flying weather so that project carry-over should be anticipated into the following year.

The prime requirement to carry out any development of Polar Bear Provincial Park is aircraft. Funds to maintain this facility have been requested for maintenance and aircraft rental, which is shown in more detail in the yearly operating plan.



## Phase 1

### Staff Requirements

It is expected that the park superintendent will be appointed on a permanent basis. In addition, the following contract or seasonal staff will be required.

Position	Time
1 Clerk-Typist	9 months
1 Visitor Services Attendant	6 months
1 Assistant Superintendent	9 months
4 Wardens (4 months each)	16 months
1 Permit Clerk	4 months
1 Visitor Services Programmer	4 months
1 Carpenter	4 months
Total	52 months

Deployment of manpower: a three-man basic Winisk complement for the maintenance of physical plant and park aircraft patrol; four men working with a carpenter on capital development projects at Site 415 Access Zone; some administrative duties to be performed by the assistant superintendent and permit clerk; Moosonee complement park superintendent based at Moosonee (with clerk-typist and visitor services attendant), to lay out the work details and oversee capital development projects and to prepare parks development plans for Moosonee District; visitor services attendant in charge of display at visitor area in the new Moosonee office building.

### Maintenance

Phase 1 funds are required under this allocation to supply charter DC-3 aircraft to transport construction material to park interior access zones and to cover basic maintenance and travel of field crews.

### Resource Inventory

Funds are required for resource inventory crews. This would involve a field naturalist and assistant on contract who will be responsible for determining wilderness carrying capacity, establishing hiking trails and canoe routes, preparation of trail and route guides, and the gathering of other information and materials to develop the themes discussed in the interpretive section of this plan.

### Master Planning

Field tours will be made by park, regional and district staff for current and future planning of development and interpretive programs.

### Equipment Required

The following items are for the upgrading and maintenance of Site 415 Access Zone roads and airstrip, movement of men and equipment and transporting garbage for aircraft pickup:

- farm tractor complete with industrial loader
- three-point hydraulic lift and blade
- four-ton farm trailer

SBX sideband radios are also needed to establish radio network for park interior access zone hookup with district radio and aircraft safety.

### Capital Development

• Rental of a Beaver patrol aircraft and crew for 200 hours based on a 14-week operation period allocation required: to provide transportation of project development work crews, park patrol for enforcement, garbage pickup, transportation of park superintendent for visiting access zones, movement of park naturalist and other staff.

• Building for office, information and interpretive area: to provide accommodation for field crew and park naturalist, summer park administration and park records at Site 415 Access Zone.

• Propane refrigerator, stove, hot water heater for housekeeping requirements at Site 415 Access Zone.

• Portable electric generators: to supply electric power to building and field crew power tools at Site 415 Access Zone.

• Storage, garage and warehouse: to provide storage for parks equipment and maintenance work area at Site 415 Access Zone.

• Water and power plant: water pressure system and pump house-warehouse to supply the Site 415 Access Zone buildings with adequate water supply.

• Dock facilities: permanent dock at Site 415 Access Zone landing lake for loading of passengers and equipment. Transportation costs for men and materials.

• Aircraft tiedown area: to provide parking space for visiting aircraft at Site 415 Access Zone.

• Mini-incinerator: for disposing of combustible Site 415 Access Zone wastes.

• Five portable privy toilets: as part of visitor facilities at Site 415 Access Zone.

• Gravel roadways, walkways and campsites: to complete the transportation network at Site 415 Access Zone and produce six campsites.

## Phase 2

### *Budget Allocation Requirement*

There will be an increase over Phase 1 salary requirement for three wardens at the Brant River Access Zone.

### *Maintenance*

Additional salary requirements will be needed for three additional seasonal employees and as stated in Phase 1.

### *Resource Inventory*

Data collection will be continued, as stated in Phase 1 requirements.

### *Capital Development*

- Seaplane anchorage: buoy in river for Brant River Access Zone.
- Modular dock: for Brant River Access Zone, plus support.
- Two portable privy toilets: for Brant River Access Zone, plus support.
- Six campsites at the Brant River Access Zone, plus support.
- Office and staff quarters: tent frames and tents for the Brant River Access Zone, plus support.
- Warehouse: for the Brant River Access Zone, plus support.
- Laboratory: lab facilities for naturalists and visiting scientists at Site 415 Access Zone, plus support.
- Park Office: to upgrade buildings and generator system.

### *Visitor Services Development at Moosonee*

- Equipment: to provide replacement vehicle for the transportation of park personnel on work patrol and transportation for park visitors.
- Sleeping bags: for use by field crews, naturalists and biologists.

## Phase 3

### *Budget Allocation Requirement*

Salaries will be maintained at same level as for Phase 2.

### *Maintenance*

There will be an increase over Phase 2 because of maintenance of additional facilities at the Brant River Access Zone.

### *Resource Inventory*

Program will be continued.

### *Capital Development*

Seven campsites will be added at Site 415 Access Zone, plus support.

### *Visitor Development at Moosonee*

- Introductory publicity: to advertise developed park.
- Equipment: four (4) tents, 10' x 12' (3.05 m x 3.66 m) for interior park camping by field data collection crews.
- Canoe and outboard motor: to provide transportation for naturalist teams.

## Phase 4

### *Budget Allocation Requirement*

There will be a drop in salary requirements from Phase 3, as full-time carpenter will not be required. Local labour will be used.

### *Maintenance*

There will be a drop in maintenance requirements since charter aircraft work will not be required. Major development and equipment have been delivered to sites over the past three years. Rental of aircraft will substitute for any requirements.

### *Resource Inventory*

Program will be continued.

### *Capital Development*

There will be renovation of the existing fire hall for maintenance and storage building and upgrading of office facilities.

### *Visitor Services Display Area at Winisk*

Exhibits of the park will be displayed.

### *Transportation Costs*

## Phase 5

### *Budget Allocation Requirement*

Salaries required during this phase will depend on the work program of previous years. Reduction because of one staff person to permanent position at Winisk.

There will also be an increase of one permanent position, Assistant Park Superintendent, Winisk. Visitor Services Programmer will also become a permanent position.

### *Maintenance Requirements*

As required, basic maintenance, increase for winter operations for one person locally.

### *Resource Inventory*

Program will be continued to next five-phase plan for the purpose of establishing park use inventory and requirements.

### *Master Planning*

This will require regional and district planning for next five-phase plan in order to determine park use inventory and requirements.



# Appendixes

## Appendix A: Letter Explaining the Objectives of the Proposed Polar Bear Provincial Park to the Attawapiskat Indian Band.\*

August 19, 1969

The area of the proposed park is approximately 7,100 square miles. The park was established in order that this country would not be further spoiled by buildings, roads and such things as are found in the settled parts of Ontario. It was also established so that the polar bear, the caribou, walrus, bearded seal, and the many kinds of geese and ducks will be protected from hunting by people other than the Indians. It was established so that the animals, birds and flowers could remain undamaged so that people from other parts of Ontario could come to the park to enjoy seeing them.

There will be no interference in the hunting and travel that the Indians have enjoyed in this area for so many generations.

In planning, it is intended that travel will be by canoe or on foot. The use of motors of all types will not be permitted to park visitors. It is hoped that the visitors to the park will employ Indian guides. It is hoped that Indians will equip themselves to guide parties of park visitors.

Visitors to the park will require special entry permits.

## Appendix B: Research by Outside Parties in Provincial Parks and Wilderness Areas.

### Policy

For the purposes of this policy, research includes studies in geology, geomorphology, botany, zoology, history, or any other discipline which is carried out within a provincial park or wilderness area.

Research activities in all provincial parks (including parks under The Historical Parks Act, 1972) and wilderness areas can only be carried out upon receipt of the District Manager's written permission. The District Manager may suspend or revoke such authorization at any time in case of failure to meet the intent of the conditions agreed upon between the researcher and the Ministry, or the intent of The Parks Act or The Wilderness Areas Act and the regulations thereunder. Authorizations from the District Manager are valid for a period of 12 months only.

Any individual or group seeking such permission must submit to the District Manager a detailed outline of the proposed study. This outline should include:

1. A statement detailing the nature and objectives of the project, its scientific value and necessity and its spatial and temporal relationship to larger or other research programs;
2. A statement of benefits, if any, to the Ministry;

3. A statement as to why the proposed study should be undertaken in the particular park or wilderness area in preference to some other location;

4. A detailed outline of the proposed schedule of operations;

5. A statement of how the environment will be affected by the research techniques;

6. A statement of any special measures required in support of the research project, such as restrictions on visitation to a park resource, or visitor interviews or questionnaires, or any logistical support which might be asked of the Ministry;

7. The name, address and qualifications of the individual who will be in charge of the project's field operations and similar data for any assistants who will be on site; the name, address and credentials of the agency or agencies that may support this project if approved by the Ministry; permits from other agencies that would be required to carry out an approved research project in a provincial park (e.g., collector's permits for wildlife; N.B. a federal or provincial collector's permit is not valid in a provincial park without the permission of the Division of Parks);

•  
8. The location of any prospective field camp and the precise location of the research site.

The Ministry must evaluate all proposals in the light of:

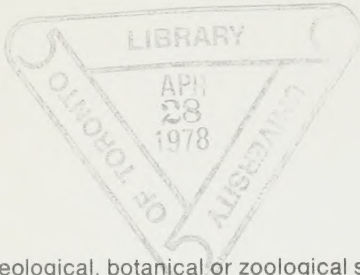
1. Compatibility of the proposed research activities with the objective and management policy of the park in question;
2. Potential of research to contribute to the objectives of the Ministry;
3. Competence and qualifications of the researchers; coherence and integrity of their research plan; compatibility and consistency with generally understood local, regional and provincial policies and concerns;
4. Compatibility of the proposed program with ongoing Ministry programs and requirements which must take precedence.

All accepted projects will be subject to the following conditions which must be made clear to the applicant at the time of acceptance:

1. All historical or archaeological materials in a provincial park or wilderness area are the property of Her Majesty the Queen in right of Ontario and properly belong to the park or wilderness area where excavated or recovered. The removal of any materials will require an artifact loan agreement and must be subject to the conditions set out in Directive PR. 7.04.09.

\* English translation from the Cree.





## References

2. Any geological, botanical or zoological specimens are the property of the Queen in right of Ontario and to be collected or consumed must be specifically requested and quantities identified. Permission will include only those specifics. The Ministry may direct where the specimens will be finally kept.

3. Any interviews with park visitors or visitor questionnaires must be clearly outlined as to information to be collected and the timing and number of visitor contacts to be made.

4. Within six months of the conclusion of field operations, the applicant must submit an interim or final report concerning the season's activities. If field operations are to be continued from year to year, submission of an interim report is a prerequisite for granting of permission for another year of work. Brief progress reports on field operations must be submitted to the District Manager during the field season at intervals specified by him and sufficient to keep him informed. The final report must be submitted within two years of the conclusion of all field operations. The report(s) should be accompanied by copies of or reference to other reports, studies, publications, etc., based in whole or in part upon the research project. The researcher must agree that the Ministry may use his or her report(s) in any way the Ministry sees fit. The Ministry will acknowledge the authors where the information is used in any further publication.

5. The applicant is subject to whatever other conditions the Ministry, through the District Manager, may require consistent with the spirit of this directive and with The Provincial Parks Act and The Wilderness Areas Act and the regulations thereunder.

6. The Ministry may require the posting of a performance bond by the applicant should doubts arise concerning the applicant's willingness or ability to conform to these conditions and any other conditions set down by the Ministry.

Irving, W. N. and J. Tomenchuck. *Archaeology of the Brant River, Polar Bear Park*. Toronto: Ontario Ministry of Natural Resources, 1972.

Pollack, J. and W. Noble. *Archaeology of the Hawley Lake Area, Hudson Bay Lowlands*. Toronto: Ontario Ministry of Natural Resources, 1975.

Prest, V., et al. "Glacial Map of Canada" (1253 A), *Geological Survey of Canada*. Ottawa: Department of Energy, Mines and Resources, 1967.

Van der Meer, J. *Interpretive Units*. Toronto: Ontario Ministry of Natural Resources, 1973 (unpublished).





April, 1977

